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경영학석사학위논문

**Investor Relations Website as a tool to
reduce information asymmetry**

2014 년 8 월

서울대학교 경영대학원

경영학과 국제경영 전공

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ABSTRACT

Investor Relations Website as a tool to reduce information asymmetry

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In the era of globalization of markets and the development of means of communication has become increasingly important the timely information factor for the participants of markets in the various regions of the world. In addition, to timeliness information it is also important is the quality of this information and the degree of credibility to it.

Until now, the problem of influence of communication means to agent theory solution and, in particular, the information asymmetry is little studied.

In this paper we have attempted to establish how well the company's high-quality website for investors helps to solve the problem of information asymmetry.

For the analysis, information was collected on 120 companies which represent the top 30 companies in 4 categories: the best Investor Relations Website, the best site with Online Annual Report, Financial Disclosure Procedure and Corporate Governance from IR Global Ranking.

To measure information asymmetry of these companies we used Yahoo Finance and BLOOMBERG database. Our findings showed that there is a strong negative correlation between quality of IRW by IRGR estimation and information asymmetry; negative correlation between financial disclosure procedures; a weak negative correlation between online annual report, corporate governance sections and information asymmetry. That means that the better the quality of IR Website the less is information asymmetry of the firm. Among such important sections of IRW for investors as financial disclosure procedure, online annual report and corporate governance financial disclosure procedure has negative correlation with the information asymmetry.

Also we found out that there is a strong regional factor. It means that the country origin of the company can influence the correlation between website ranking and its information asymmetry.

Keywords: *agency theory, information asymmetry, investor relations, investor relations website, information transparency and disclosure*

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CHAPTER I

INTORDUCTION

Information technologies made a great breakthrough all over the world during the past decade, continuing to develop further and further. In addition, thanks to Internet many people's lives become much easier. Every day a number of users of Internet resources is growing. In developed countries, many people do not even imagine life without the Internet. Almost all the information necessary for life on products, services, companies we can get from the Internet. The Internet has become a great opportunity for business to demonstrate its "informational face." Through the creation of websites, companies have a great opportunity to introduce themselves around the world. Nowadays website of a company is the most common source of information about it. To get the necessary information about the company and its products interested person first comes to its site, hoping to get information. Sometimes we can get all the necessary information we need sometimes we got nothing. Sites of different companies have different purposes. They can be oriented to attract customers, provide feedback to them. They can be used as a tool to communicate with competitors, as well as a tool for communicating with investors. Some sites are interactive and comfortable for using but there are also sites that are not only uncomfortable for using but also don't contain any helpful information.

The object of our study is the last of the site, the so-called site for investors or Investor Relation Website (IRW). Such kind of sites (or links to investors in a number of company websites) oriented to investors, and the main interest of their information - its financial statements. This is primarily cash flows, the dynamics of profit, sales, long-term development plans, especially management and availability of new products (O'Neil, 2003). Good quality IRW contains full information necessary for investors. The subject of our study is IRW as a tool to reduce information asymmetry. It means that quality IRW, that in time provides accurate information regarding to the current management of

the company, its financial condition, as well as satisfies the information needs of investors and shareholders becomes an effective means to reduce information asymmetry; (when one side is aware of the current situation in the company, and the other - has no clue). Creating a quality website, the company makes its own information (especially financial) available to investors who, in turn, are able to have a complete picture of the company's development, especially its financial component before their eyes. Information transparency, availability of necessary information allows investors to make the right decision in time that may reduce transaction costs. Of course, the presence of the Internet and using it to optimize corporate governance in modern companies is not a decision for all problems. However, many researchers who are now dealing with this issue can confidently assert that the use of Internet technology can help to facilitate communication. Of course, there are enough problems, for example, the problem of organizing security of the information flow (privacy for individual investors, safety of online correspondence), etc. In addition, there is a problem of the company's desire to be open. Not all companies strive to be open for various reasons: the reluctance to disclose financial statements, the reluctance to give out the information available to competitors, the desire to cover up the problems, because of unscrupulous administration. However, many developed, successful companies today are open; it is mostly large successful companies of the developed countries. Many companies, reaching a new level of development, in an effort to attract foreign investors, eager to meet the level of reporting and investor communications of major international companies and build their activities in accordance with international standards.

Good quality IR website is not just a simple screen with pictures in front of the investor. It is also interactive communication. "Investors can vote proxies, buy the company's stock, listen to quarterly conference calls and manipulate information online through analytical and financial modeling tools, and customize the website."(IRGR)

In our work we used the ranking of sites compiled by IR Global Rankings.

The IR Global Rankings (“IRGR”) is the most comprehensive ranking system for investor relations websites, corporate governance practices and financial disclosure procedures. This ranking is based on extensive proprietary research of publicly traded companies through a clear and transparent methodology supported by key global institutions such as Arnold & Porter, KPMG, MZ and Sodali. It is based on technical reviews (not on the opinion surveys or polls) and is supported by the input of audit and legal experts. (IRGR).

We analyze information about sites for investors, taken from statistics of IR Global Rankings, and investigate how the leading position in the ranking of sites correlated with the asymmetry of information. Also, by using detailed statistical computation on a site, we want to find out which sections of the site for the investor have the least connection with the asymmetry of information.

CHAPTER II

LITERATURE REVIEW

2.1. Agency Theory

Both of these terms play an important role in corporate finance theories and have their roots in the information economics literature.

Agency theory: a theory that looks at how to ensure that agents (executives, managers) act in the best interests of the principals (owners, shareholders) of an organization. (A. L. Cunliffe J. T. Luhman). Agency relationships arise in cases where one or more individuals, called principals employ one or more individuals, called agents, to provide any service and then endow agents' decision-making powers. In the context of financial management primary agency relationship - a relationship: 1) between shareholders and managers, and 2) between the creditors and shareholders. (Jensen M. C., Meckling W. H., 1976). Main point in the agency theory is the problem of how to get an agent to act on behalf of principals. In this connection, there are two major problems: how to combine different interests of principals and agents, and how to get agents to act in accordance with the expectations of principals. Another problem also lies in the fact that principal cannot always verify whether the agent acts in his interest, as the agent may submit distorted information about the company (Eisenhardt K. 1989).

Potential agency conflicts are very important for most large corporations, since, as a rule, managers of such a large firms own only a small percentage of their shares. In such kind of situation, maximizing of the shareholder wealth may not be the primary goal of the manager. For example, according to many experts, the main purpose of the manager-agent is to increase the size of the firm. (Wildsmith J. R., 1974.)

Agent theory gives his assessment of the impact of conflict of interest two sides:

- shirking by the agent,

- diversion of resources by the agent for private consumption
- differential time horizon of the agent and principal
- differential risk aversion of the agent and the principal. (Lambert R.A., 2001).

2.2. Information asymmetry

The notion of information asymmetry originally arose in the theory of uncertainty and risk in the works W. Vickrey (1961). Later the problem of information asymmetry in the market economy had a place in the works by foreign economists. (G. Akerlof (1970); S. Grossman (1977, 1980); M. Spence (1973); J. Stiglitz(1980); J. Stigler (1987); K. J. Arrow(2004, 2009), etc.)

Information Asymmetry is a situation in which one party in a transaction has more or superior information compared to another. This often happens in transactions where the seller knows more than the buyer does, although the reverse can happen as well. Potentially, this could be a harmful situation because one party can take advantage of the other party's lack of knowledge. In 1970, G. Akerlof wrote a paper "The Market for Lemons." In this article, Akerlof gave his own explanation to widely known fact, when the car that was in use only a few months, sold for considerably less price than a new one: if almost new car sold, then the probability that it is a car of low quality increases. In other words, a nice car won't be sold immediately, but the price of almost a new car not only provides information about its real quality but much information about suspicions of potential buyers of its low quality, that is, knowing that the likelihood of low quality in almost new car is above. (Akerlof G. 1970). Later Spence cites as an example of a job market. When an employer hires an employee, he does not have an accurate picture of its performance. That is why his decision is under question. It does not always happen immediately clear whether he took the right decision or not, because an employee, to show results first of all have to learn. Therefore hiring employees – is like an investor decision. You

have no opportunity to know beforehand whether it was correct or not. He compares it with the lottery (Spence 1973).

The essence of information asymmetry that different members , levels and divisions of the organization , having different sources of information , access to different information and different abilities to handle it , may provoke the emergence of dysfunctions . For example, a single individual who has exclusive access to certain sources of information may seek to monopolize information and use it for their own purposes, which in turn may strongly disagree with the generally recognized. Information asymmetry pushes someone to improve its position at the expense of others. (Akerlof G. 1970).

In this paper, the researcher is interested in agency problem and the problem of information asymmetry between managers and investors. Investors are investing their own money in the development of companies suggesting that managers will act in accordance with their expectations. However, not everything always keeps going on this way. To resolve this problem within the framework of investor relations companies create Investor relation Websites of their company. Due to such kind of websites through which investors can monitor the actions of managers and obtain the necessary information in time they can make the right decisions.

2.3. Investor relations. Investor Relations Website

One of the first works on the investor relations belongs to C. Marston, who gave the following definition to this term: “IR- the link between a company and financial community and the investing public to evaluate a company”. (Marston, 1996) Investor relations is the communication of information relating to the company to the financial community; analysts, investors and potential investors. It is regarded as a relatively new phenomenon, which has developed most rapidly in the USA followed by the UK. (Marston, Straker, 2001). In his early works investor relations considered to be exclusively aimed at informing investors about the financial achievements by providing reports (quarterly, annual). Today, however, with the

development of internet technology and desire of many companies as possible to be in step with the times, investor relations have become something more than just a statement of the company to investors. It is possibility of their participation in on-line conferences, discussion forums; regularly follow the news and activities of the company, especially in the financial statements. The company had more opportunities to talk about themselves and attract the attention of potential investors. With the advent of the latest Internet technologies emerged the possibility of a qualitatively new form of communication (Deller, 1999). Catherine Gowthorpe (2004) examined how the Internet is used for reports of financial statements to shareholders. It turned out that the assessment of the needs of stakeholders to provide corporate information is more casual than a certain character.

The author concluded that companies tend to use the internet merely to “push” more information to investors, instead of focusing on the potential of internet opportunities for investors to “pull” the information from companies.

Special role played by so-called feedback and the way it is used in a company. This is primarily e-mail connection (Hassink, Bollen, Meinderd, 2008). It is important to understand that any company that appreciates itself with quality corporate IR website must satisfy the informational needs of investors, shareholders and other stakeholders. It is very difficult to predict in what kind of specific information will be interested this or that investor while annual and quarterly reports are mostly of a general nature. Using feedback investor may submit a request for specific information of interest to him. This raises an important point: how the company develops IR-staff, how quickly investor will receive the response to his request and get the necessary information.

In the earlier paper “Measuring and explaining the quality of Internet investor activities: a multinational empirical analysis” L. Bollen, H. Hassink, G. Bosic defined quality indicators and determinants of IRW according to characteristics of 270 companies in 6 countries. The

suggestion of the paper is that corporate website's major functions are disclosure of company information and supporting stakeholder relations. The role of internet investor relations increases from year to year. The authors note that previous studies have focused on the fact of using the Internet to disseminate information about the companies themselves, whereas later researchers have tried to explain the degree of involvement of companies in the investor relations on the Internet. Large international-oriented companies with large proportion of shares available to individual investors are more involved in IIR activity. However, this work, like most of the previous analysis was based on data from the IRW of the companies, i.e. on the basis of information that the company publishes on its corporate website. As the authors note in the later work «Symmetrical versus asymmetrical company-investor communications via the internet» it can't be accurately said that the use of internet technology has a significant effect on the development of IR, because we do not have data on how well the individual work with investors is organized. The authors note the prospects for development in e-mail communication through which investors can submit a request to obtain the necessary information, besides an internal communication between investors and shareholders will be perspective. This will make the IIR process more symmetric and investors will play an active role.

With the development of the Internet, we have an opportunity to provide two-way interactive communication model instead of a one-sided limited communication model (Kuperman, 2000). Today, it is easy to achieve by using conference calls, regular meetings and via the Internet. This will help not only the communication between the company and investors, but also among investors.

The Investor Relations ("IR") website «is the first intuitive resource for most people seeking information about a company and is also the main communication channel used by companies to interact with the capital markets universe». Special IR groups can manage the company's message, in multiple formats and languages, and update relevant disclosure quickly and rather inexpensively. It provides equal access to all interested people through real time. It

can be also an effective channel for investor communication and a good opportunity for disclosure for material events, instead of the more traditional means of press releases to the major wire services (IR Global Ranking).

2.4. Information Transparency and Disclosure

Another major part of the work is devoted to the so-called information transparency and disclosure of the companies (Sharma, 2013; Agboola, Salawu 2012; Evans, Trinkle, Henderson 2011; Khan 2013; Marston 2003 etc.). Many authors raise the question of how transparent and regular information provided by companies. First of all when talking about information transparency we mean financial reporting, its availability and quality. It is primarily financial statements that enables investors to monitor the financial activities of the company. The basic amount of works explores the relationship between information transparency and success of the company and the factors that determine this information openness. In various papers presented research on different countries where the authors call several criteria affecting the level of disclosure of companies. For example, in studies of Chinese companies revealed that in the past the presence of foreign capital are more likely to disclose information. The larger the company, so it is more open. However, the openness of the company's profitability and are inversely correlated (Liu, Eddie 2007). On the connection size, digging and information openness wrote Firth (1979). Studies (Lang, Lundholm, 1993) have shown that companies with high productivity are more open. Paper by (Cormier, Ledoux, Magnan, 2009) based on an analysis of Canadian companies found that disclosure of information related to the financial and social activities of the company affects the value of the company. Finally a number of works of scientists from different areas of the world with the study of IRW in their own countries. For example, a case study of IRW in Turkey by B. Pinar Ozdemir (2010) highlighted the need to expand opportunities for dialogue with investors. In particular, the author notes, in order to find information for investors on the websites of some of the companies

he had to spend too much time. In this regard, he offers to "locate IR in a distinctly visible point of website" and bring on-line support into action (127).

Greece. This study provided us useful information about corporate reporting in the internet in smaller listed companies. According to the paper smaller companies use the internet mainly to distribute fundamental financial information such as annual reports or financial statements. Authors concluded that these companies failed to use the potential of the internet in their interests for improving the content and presentation of investor-related information. (Example 30.3% of the websites of the smaller firms provided analyst lists, 22.7% mailing list, 21.2% an English version of the annual report, 12.1% a financial calendar and 4.5% video/audio files" (Spanos, Mylonakis, 2006).

Saudi Arabia, Oman: From 246 companies only 154 provide internet financial reporting on their websites. Some of these companies use the PDF format to publish financial information and most of them use the internet to provide additional financial information, in the form of financial highlights (Basuony, Mohammed, 2014).

Japan: Only 57 from 92 investigated home pages of Japanese companies presented more detailed information (that was balance sheet, profit - loss account) (Marston , 2003).

USA. According to the Fortune 500 the authors studied the use of corporate web sites as a communication channel for investor relations and financial public. Most of the companies use new advantages of the web technologies for the website format. Companies involved in investor relation activity via internet are almost the same industry type. Investor relations in the internet positively associated with the revenue and profits (Ki, Chung, 2011).

CHAPTER III

HYPOTHESIS

Our hypothesis is closely related to the theory of asymmetric information. Some authors mention that a quality website for investors is positively correlated with activity online investors (Bollen et al., 2008). Another authors show that online investor activity has a positive effect on the growth of the company (Lauret van der Put, 2011). In this regard, we make the assumption that a quality website for investors can reduce the asymmetry of information.

H1. A quality website for investors reduces information asymmetry.

H2. A quality IR website for investors positively associated with the revenue and profits.

CHAPTER IV

METHODOLOGY

4.1. Information Asymmetry Measuring Method

Measures of information asymmetry can be divided into three broad categories such as:

- measures based on analysts' forecasts,
- investment opportunity set measures,
- market microstructure measures

For the analysis, we choose measure by Huang and Stoll (1997) econometric model that is widely used in the market microstructure literature (Hyuk Choe, 2006).

Our microstructure measure of information asymmetry is taken from a literature indicating the bid-ask spread.

The following model equation derived through the three values. (Huang and Stoll, 1997).

First, if the stock's intrinsic value is V ,

Second, the number of for-sale in the middle of the call if the value M ,

$$V_t = V_{t-1} + \alpha \frac{S}{2} Q_{t-1} + \varepsilon_t$$

Spread through this expression α is a component of the intrinsic value of the stock change due to information associated with a cost that can be found in the information asymmetry.

Second, if the buy-sell value in the middle is M

$$M_t = V_t + \beta \frac{S}{2} \sum_{i=1}^{t-1} Q_i$$

In this equation, since the $\sum_{i=1}^{t-1} Q_i$ in the market is opened up to the time t-1 refers to the cumulative inventory and, therefore, β is a component of the spread represents the cost associated with maintaining inventory.

Third, if the transaction price is P.

$$P_t = M_t + \frac{S}{2} Q_t + \eta_t$$

The expression model spread S is fixed during the measurement period, and means supposed.

Dependent Variable

Information Asymmetry

measure α by the difference in stock's intrinsic value V in t and t-1 periods, divided by spread.

Independent Variables

IR Website quality

Online annual report quality

Financial disclosure procedure quality

Corporate governance quality

These figures are taken from IRGR database and are measuring stock changes of each company.

Bid-ask spread

This figure is taking from Yahoo Finance, REUTERS, BLOOMBERG database for each company.

Stock intrinsic value

This figure is taken from Yahoo Finance database and is measuring stock changes of each company.

CHAPTER V

RESULTS

Tables 1-4 present statistics on our variables.

During our analysis, we took the ranking of sites for investors from IRGR. Rating IGR shows the first 30 companies whose website for investors scored the most points by each criteria as:

- **IR Website Quality**
- **Quality of Online Annual Report**
- **Financial disclosure procedure**
- **Corporate Governance**

For each criteria among 30 listed companies there were selected those that scored from 70 to 98 points. So we applied HS model for information asymmetry to 12 - 15 companies by each criteria.

Our results showed very low, negative asymmetry of information firms that have a quality website for investors. According to our results the average α was:

- 0.0292 for IR Website Quality
- 0.0223 for Online Annual Report Quality
- 0.0161 for Financial Disclosure Quality
- 0.0257 for Corporate Governance Quality

According to previous results of Hyuk Choe and Choel-Won Yang (2006) α index was 0.42; Dennis and Wecton (2001) showed α as 0.34; Huang and Stoll (1997) found α as 0.1.

So we found that companies with the high quality IR Website have very low, mostly negative correlation with the information asymmetry.

Descriptive Statistics

Table 1 Information Asymmetry for Companies with High-Quality IR Website

Variable	Mean	S.D.	Min	Max
IR Website ranking	81.87	3.8237	77.4	89
Information Asymmetry (α)	-0.0292	0.0338	-0.0896	0.0317
Bid-ask spread (S)	45.7977	51.5531	1.95	153.85
Revenue	1.0304	0.0804	0.9325	1.1898
Profit	1.0356	0.0772	0.9368	1.2088

Table 2 Information Asymmetry for Companies with High-Quality Online Annual Report

Variable	Mean	S.D.	Min	Max
Online Annual Report	73.78	5.0593	67	85
Information Asymmetry (α)	-0.0223	0.0218	-0.0571	0.0155
Bid-ask spread (S)	41.7	30.15	3.47	84.38
Revenue	1.0506	0.0677	0.954	1.1687
Profit	1.0593	0.0719	0.9531	1.1687

Table 3 Information Asymmetry for Companies with High-Quality Financial disclosure procedure

Variable	Mean	S.D.	Min	Max
Financial disclosure procedure	89.07	2.2943	87	94
Information Asymmetry (α)	-0.0161	0.0337	-0.0896	0.0317
Bid-ask spread (S)	108.2143	289.6776	1.95	1104.5
Revenue	1.0134	0.1255	0.9825	1.1898
Profit	1.0626	0.0657	0.9825	1.1898

Table 4 Information Asymmetry for Companies with High-Quality Corporate Governance

Variable	Mean	S.D.	Min	Max
Corporate Governance	89.9533	3.0584	84.5	94.5
Information Asymmetry (α)	-0.0257	0.0198	-0.0579	-0.0020
Bid-ask spread (S)	211.5997	348.6406	3.47	1104.5
Revenue	1.0655	0.0362	1.0256	1.115
Profit	1.0772	0.0397	1.0296	1.1262

We checked the relationship between the quality of the website and its quality parameters, such as: online annual report, financial disclosure procedure, corporate governance and the Table 5 displays the results.

Table 5 Correlation matrix

Variable	IR Website Quality	Online Annual Report Quality	Financial Disclosure Procedure Quality	Corporate Governance Quality	Revenue	Profit
Information Asymmetry (α) for IR Website Quality	-0.7935				0.4713	-0.4964
Information Asymmetry (α) for Online Annual Report		-0.2326			-0.7493	-0.1381
Information Asymmetry (α) for Financial disclosure procedure			-0.5559		0.0118	-0.6813
Information Asymmetry (α) for Corporate Governance				-0.2719	0.5222	0.4900
Revenue	-0.3592	-0.0984	-0.3705	0.1253	1	
Profit	0.0565	0.1658	0.5556	0.3698		1

We found that there is a strong negative correlation between quality of IRW by IRGR estimation and information asymmetry; negative correlation between financial disclosure procedures; a weak negative correlation between online annual report, corporate governance

sections and information asymmetry. That means that the better the quality of IR Website the less is information asymmetry of the firm. Among such important sections of IRW for investors as financial disclosure procedure, online annual report and corporate governance financial disclosure procedure has negative correlation with the information asymmetry.

There is no direct relationship to the change in profit and revenue for the previous period and the quality of the site for investors. But as we can see Profit shows weak positive correlation with high-quality Financial Disclosure Procedure, also negative correlation with Information Asymmetry for companies with high-quality Financial Disclosure Procedure.

Regional aspect

Among selected companies by each criteria we found out regional features.

As for the IR Website quality we found that for European companies (8 among 15) correlation between IR Website quality and information asymmetry it was -0.8332 that is higher than average meaning for all companies in the meaning of -0.7935. At the same time another big group of companies (6 of 15 selected) from Latin America showed relatively high coefficient of information asymmetry and non-significant correlation between IR Website quality and information asymmetry as -0.2499.

As for about Online Annual Report Quality European companies (8 of 12) showed very strong correlation with information asymmetry in the meaning of -0.9001. At the same time, the overall correlation coefficient for all companies was -0.2326.

For the Financial Disclosure Procedure Quality there is negative correlation as -0.5559 in general; for European companies (5 of 14) correlation index is -0.6776; for Latin American companies (6 of 14) correlation is -0.6902. We can note the decrease of the influence of the

regional factor and a clear negative correlation between Financial Disclosure Procedure Quality and Information Asymmetry.

Corporate Governance Quality has no correlation for general -0.2719 neither for European (5 of 15) 0.1485 or Indian (4 of 15) 0.1351 companies.

CHAPTER VI

LIMITATIONS AND IMPLICATIONS

The main contribution of our work is that we raise a little studied problem of the influence of modern information tools to solve the problems of firm management. In particular, how the company's website for investors can help to solve the problem of agency theory in the light of information asymmetry.

We found that among selected sections of IR Website high-quality Financial Disclosure Procedure has correlation with Profit rate and negative correlation with Information Asymmetry, also Profit rate has negative correlation with Information Asymmetry.

Our work suggests ways to further explore this issue. We encountered a number of limitations in solving the problems. Such restrictions are:

- One year of evaluation
- Using one model of market microstructure measures in evaluating

There is a strong regional aspect in results so we see in the course of future research a deeper study of the impact of regional factors, as well as the placement of shares (especially the placement of stock exchange where stocks are traded) as to the information asymmetry and its relationship with the quality of the site for investors.

Nevertheless we hope that the results of our research will help in understanding the role of the corporate website in reducing information asymmetry.

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국문초록

정보 비대칭을 줄일 수 있는 수단으로써의 투자자 전용 웹사이트

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현재 시장 세계화 및 통신 수단 발전의 시대에서는 여러 지역의 시장 참여자들이 시장 관련 확실한 정보 제 시간에 전달하는 것은 가장 중요하다. 또한 그 정보의 확실성과 신뢰성이 매우 중요하다고 생각한다.

지금까지 통신 수단이 대리인 이론 또는 정보 비대칭 이론에 어떠한 영향을 주는 지에 관한 연구가 많지 않다.

최근에 IT 기술은 경영에서 활발하게 사용하게 됨으로써 Investor Relations Website 같은 기술의 출현이 경영 프로세스와 그에 따른 문제점들에 영향을 주는 것에 대해서 연구할 필요가 생겼다.

저희 논문에서는 IRWebsite 의 질은 Agency Theory 관련된 정보 비대칭성에 어떠한 영향을 주는 지를 연구하고자 한다.

저희가 분석하기 위해서 Investor Relations Website Quality, Online Annual Report Section Quality, Financial Disclosure Procedure Section Quality, Corporate Governance Section Quality 등 4 기준으로 30 개의 선도 기업 총 120 개에 대해서 Investor Relations Website Global Rankings(IRGR) Database 에서 자료를 찾았다.

그 업체들에 관한 정보비대칭을 측정하기 위해서 Yahoo Finance 와 Bloomberg Database 를 이용했다.

저희 연구 결과는 정보비대칭은 IRWQuality 와의 강한 음의 상관관계; Financial Disclosure Procedure Section Quality 와 음의 상관관계; Online Annual Report Section Quality 및 Corporate Governance Section Quality 등과의 약한 음의 상관관계가 나타난다. 이것은 바로 회사가 투자자 전용 웹사이트 질이 좋으면 좋을수록 회사 정보비대칭이 낮다. 회사의 Online Annual Report, Financial Disclosure

Procedure, Corporate Governance 등의 section 들 중에 Financial Disclosure Procedure 가 정보비대칭에 영향을 줄 수 있다.

또한, 연구 결과는 지역요인 나타난다. 이 것은 회사의 원산지 또한, 회사 활동하는 주식 거래소 위치는 회사의 웹사이트 질에 관한 순위와 정보비대칭간의 상관관계에 영향이 있다.

주요어: 대리인 이론, 정보비대칭, 투자자 관계 투자자 전용 웹사이트, 정보의 투명성과 공개

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